

**REMARKS**

This Amendment responds to the final Office Action mailed March 8, 2005. Claims 1, 4, 6 and 8-12 remain pending in the application prior to this amendment. Claims 1, 6 and 8 were rejected. Claim 9 was objected to for depending from a rejected base claim and claims 4 and 10-12 have been allowed. Claims 1 and 8 have been amended and claim 9 has been canceled herein.

Applicant would like to thank the Examiner, Brenda Lamb, for the telephone interview conducted with Applicant's representative, David W. Dorton, on April 21, 2005. During the interview, support for the amendment and drawings filed October 18, 2004, were discussed, and the Examiner agreed that the specification does indeed support the amendment and drawings, as noted in the Interview Summary. The language of claims 1 and 8 was also discussed, and the Examiner proposed amendments to clarify the language of these claims. Claims 1 and 8 have been amended accordingly.

In view of the telephone interview and the amendments made herein, Applicant submits that all pending claims are now in complete condition for allowance and respectfully requests allowance thereof. The following remarks are respectfully submitted.

**Objections to Amendment and Drawings**

The Amendment and Drawings filed October 18, 2004, were objected to and the proposed drawings were disapproved for allegedly introducing new matter.

Specifically, the Examiner alleges that the "originally filed specification fails to teach a piston and sealing body seal off a portion of the passageway for example [a] portion of the passageway directly behind [a] slider to prevent formation of dead space where fluid could accumulate." (Final Office Action at p. 2, first paragraph.) Applicant respectfully traverses and directs the Examiner's attention to the application at page 8, line 10 through page 9, line 6, and to originally filed claim 9 to support the amendment and corrected drawings.

The application is directed to an apparatus for applying fluid to a substrate, and more particularly, for gluing inner books. The apparatus may include first, second, and/or third slot nozzles, each having a nozzle outlet through which fluid is applied to the substrate. The first and second nozzles may include movable seal members (sliders) for adjusting the width of the respective nozzle outlets. The Detailed Description describes embodiments wherein the first, second and/or third slot nozzles include:

a fluid passageway extending across the entire width of the slot nozzle. A piston moves in the fluid passageway to seal the fluid passageway. A sealing body extends into the plane of the slot nozzle outlet. The piston and the sealing body cooperate to adjust the width of the slot nozzle outlet transversely to the principal direction of movement of the substrate. In such an embodiment it is possible, in an advantageously simple manner, to limit the width of the slot nozzle not only at its outlet, but also deep inside the respective slot nozzle body itself. In this way, it is possible to avoid the formation, upstream from the plane of the slot nozzle outlet, of dead spaces in which the fluid being applied to the substrate could otherwise accumulate and obstruct the flow. Unless a piston and a sealing body cooperating therewith are provided, hot-melt adhesive, for example, might flow only slowly or not at all in the direction of the

substrate to be coated, in those areas that are located upstream from the slot nozzle outlet which is partly limited (covered over, for example) by the movable seal members. The risk would then ensue that the adhesive flowing slowly or not at all within the body of the slot nozzle will harden and permanently clog the slot nozzle. These risks can be totally excluded for all practical purposes with the embodiment according to the invention. (Application at p. 8, line 10 – p. 9, line 6.)

Originally filed claim 9 is directed to an apparatus for applying fluid to a substrate and recites:

a piston that is movable in the fluid passageway to seal the latter, and

a sealing body extending within the plane of the slot nozzle outlet, wherein the piston and the sealing body co-operate to adjust the width of the slot nozzle outlet transversely to the principal direction of movement of the substrate.

Applicant asserts that at least these portions of the originally filed application support the proposed amendment and drawing correction. Specifically, FIG. 2 schematically depicts what is described in the specification and recited in originally filed claim 9. If the sealing body is to extend within the plane of the slot nozzle outlet (depicted as dashed line 69 in FIG. 2), then at least one surface of the sealing body must be positioned at the slot nozzle outlet, and therefore must be located directly behind the slider (seal member) which "extends into and/or in front of the plane of the respective slot nozzle outlet." (Application at page 7, lines 15-17.)

The sealing body and piston move in the direction of the arrow shown in proposed FIG. 2 (adjacent piston 66 and sealing body 68), which is oriented transverse

to the principal direction of movement of the substrate (into and out of the drawing sheet). In this way, the sealing body can be adjusted to close off that portion of the fluid passageway behind the slider which would otherwise create a dead space in the flow when the slider is moved to make the width of the slot nozzle outlet smaller. If the sealing body and piston did not lie directly behind the slider to thereby seal off that portion of the passageway directly behind the slider, as depicted in FIG. 2, then the sealing body and piston would not cooperate to "limit the width of the slot nozzle not only at its outlet, but also deep inside the respective slot nozzle body itself," and thereby "avoid the formation, upstream from the plane of the slot nozzle outlet, of dead spaces in which the fluid being applied to the substrate could otherwise accumulate and obstruct the flow," as set forth in the specification.

For at least these reasons, Applicant asserts that the originally filed specification does indeed support the proposed drawing correction and amendments to the specification wherein a piston and sealing body seal off a portion of a passageway directly behind the slider to prevent the formation of dead space where fluid could accumulate. Accordingly, Applicant respectfully requests that the objections to the Amendment and Drawings be withdrawn, and that the proposed drawing correction and proposed substitute sheets be approved.

**Claims Rejected Under 35 U.S.C. §103**

Claims 1, 6 and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of U.S. Patent No. 6,423,144 to Watanabe and U.S.

Patent No. 5,846,599 to Innes et al. Claims 1 and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Watanabe and U.S. Patent No. 5,516,545 to Sandock. Claim 1 is the only independent claim of this rejected group and has been amended herein to include the subject matter of claim 9. Claim 9 was objected to for depending from a rejected base claim. Applicant asserts that amended claim 1 is now in condition for allowance as it includes the allowable subject matter of claim 9. Accordingly, Applicant respectfully requests that the rejection of claim 1 be withdrawn.

Claims 6 and 8 each depend from independent claim 1 and are therefore in condition for allowance for at least the reasons stated above for amended claim 1. Claim 8 has been amended, as suggested by the Examiner, so that the language of claim 8 corresponds to the language added to claim 1. Accordingly, Applicant respectfully requests that the rejections of claims 6 and 8 be withdrawn.

#### **Allowable Subject Matter**

Claim 9 was objected to for depending from a rejected base claim. The subject matter of claim 9 has been added to claim 1, as discussed above. Accordingly, the objection of claim 9 is no longer an issue in this application.

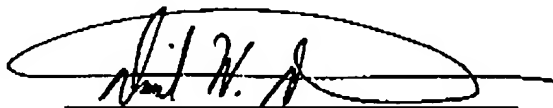
In view of the foregoing amendments to the claims and remarks given herein, Applicant believes this case is in condition for allowance and respectfully requests allowance of the pending claims. If the Examiner believes any detailed language of the claims requires further discussion, the Examiner is respectfully asked to

telephone the undersigned attorney so that the matter may be promptly resolved. The Examiner's prompt attention to this matter is appreciated.

Applicant is of the opinion that no additional fee is due as a result of this amendment. If any charges or credits are necessary to complete this communication, please apply them to Deposit Account No. 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.

A handwritten signature in black ink, appearing to read "David W. Dorton", is written over a horizontal line.

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